Running Head: Status Congruency

Leadership Status Congruency and Cohesion in Outdoor Adventure Groups

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Abstract

The general purpose of the present study was to examine the relationship between status congruency and group cohesion in an outdoor expedition setting. Specifically, three aspects of status congruency were assessed in relation to group cohesion in four adventure canoe groups. These groups were participating in two week expeditions in the northern areas of the Canadian provinces of Ontario and Quebec. The participants were 32 upper year undergraduate students enrolled in a central Canadian university (M_{age} = 22.41 $\pm$ 2.43 years). Results indicated that (a) individuals who ranked themselves higher in the group's status hierarchy compared to where their peers ranked them had decreased attractions to social aspects of the group; (b) perceptions of group cohesion were greater when individuals occupying formal leadership positions were higher in the group's status ranking (i.e., greater congruency between formal and informal status hierarchies); and (c) individuals who were members of groups that had some level of consensus regarding status rankings perceived their groups to be more cohesive than those who were members of a group that had no consensus.

Key words: status, status congruency, outdoor adventure programming, cohesion

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Introduction

In a report outlining strategies of communication and problem-solving in outdoor adventure education courses, Raiola (2003) presented a hypothetical situation whereby eight people need to cooperate to cross a fast moving river. In this situation, Raiola highlighted that "You, the leader, need to know what to do and…draw on special individual knowledge and strengths…some individuals may be able to contribute more skill and support than others" (p. 50). Knowledge of others' abilities may ultimately influence who group members turn toward in order to make decisions in various situations and the amount of importance each individual is afforded within the group. The present study investigated the concept of 'status' within outdoor adventure leadership groups and its relationship with another important group oriented variable; namely, cohesion.

Literature Review

Status represents the amount of importance/prestige possessed by or accorded to individuals by virtue of their position in a group (Jacob & Carron, 1994). Determination of the overall status of each individual group member takes into account all the relevant attributes in a specific context. This placement into the hierarchy of the group is termed an individual's status rank and the placement of each member has implications at both the individual and group levels (e.g., communication patterns; Martinez, 1989).

Another group level variable that has been linked to perceptions of status is cohesion (Jacob & Carron, 1998). Carron, Brawley, and Widmeyer (1998) defined cohesion as "a dynamic process which is reflected in the tendency for a group to stick

together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (p. 213). This construct has been called the most important small group variable (Golembiewski, 1962) and consequently it has been the subject of great research interest across many areas of study (Carron, Hausenblas, & Eys, 2005).

A study conducted by Jacob and Carron (1998) examined the relationship between status and cohesion within athletic teams. Their main objectives were two-fold: (a) to determine if the importance athletes attach to status had an influence on perceptions of cohesion and (b) to examine if congruency in status rank is related to cohesion. The latter objective is most relevant to the present study and thus warrants further explanation. Jacob and Carron (1998) operationalized status congruency in two ways. The first, termed reciprocal status ranking, was a comparison between how the individual would rank him/herself in the group vs. the normative ranking (i.e., the average of the other group members' rankings of that person). The second status congruency comparison was termed originator status ranking and was focused strictly on the individual's perception of self in the group; essentially, where the individual has ranked him or herself.

In general, Jacob and Carron's (1998) results did not support their hypothesis that status congruency/ranking would be related to perceptions of cohesion. However, their methodology and discussion of results highlighted that there is more than one way to assess status congruency and that other methods might be more relevant. In fact, a review of previous literature from other areas of social psychology yields at least three comparisons of status ranking. The first would be the approach taken by Jacob and

Carron (1998), which was the degree to which the individual's perception of the status ranking of him/herself is similar to the normative ranking of other group members (i.e., individual vs. other's perceptions).

A second approach to the assessment of status congruency has been the degree to which the informal status hierarchy is similar to the formal hierarchy. Bass (1980) highlighted that two streams of status could arise in a group. On one hand, formal status refers to the position individuals hold because of prescriptions given by the organization, group, or team (e.g., team captain or lead guide on a canoe expedition). On the other hand, informal status would arise through the esteem group members have for other individuals. Ideally, if the high esteem member (i.e., informal leader) has many positive attributes and does not occupy that position for negative reasons (e.g., being the loudest member of the group), the formal and informal status structures should be made similar. However, in many cases formal status structures are determined by attributes other than ability and leadership (e.g., seniority). This may lead to power issues between multiple leaders as well as changes in cohesion and group effectiveness (Carron, Hausenblas, & Eys, 2005).

A third assessment of status congruency is the degree of *consensus* among group members as to the hierarchy or status rank structure of the group. In this particular case, the assessment is centered on whether members are in relative agreement with regard to who possess higher and lower status. From a physical activity group perspective, Jacob and Carron (1998) concluded that member consensus would likely be more important to the cohesiveness of the group than (a) absolute status rank or (b) types of status attributes that are present, and highlighted the necessity of examining this issue in future research.

Consequently, the general purpose of the present study was to further examine the relationship between status congruency and group cohesion in an expedition and outdoor educational setting. Three aspects of status congruency were assessed in relation to group cohesion with four adventure canoe groups. First, examining one of Jacob and Carron's (1998) propositions, a relationship between reciprocal status ranking (i.e., the discrepancy between the individual's ranking of him/herself and the normative ranking for that individual) and cohesion was tested.

Second, as will be seen in the methods section, all participants were required to fulfill a formal leadership role within their group for at least one full day of the expedition as part of the formal course objectives. Consequently, lower esteem status members were purposely placed in high formal status positions within the groups. Thus, an assessment of the effect of incongruency between formal and informal status hierarchies was possible in relation to cohesion.

Finally, the degree to which members were in agreement with regard to the status hierarchy of the group (i.e., consistency of status rankings amongst members) was examined in relation to cohesion.

Method

Participants

The participants in the present study were 32 upper year undergraduate students enrolled in a central Canadian university. Each participant (M_{age} = 22.41 $\pm$ 2.43 years) was a member of one of four groups ($n_{\text{Group 1}} = 8$, $n_{\text{Group 2}} = 7$, $n_{\text{Group 3}} = 8$, $n_{\text{Group 4}} = 9$). Course instructors made every attempt to equalize the groups in terms of the division of gender (males = 13, females = 19), experience in *taking* previous whitewater trips (M =

4.97 ± 5.10 trips), experience in *leading* previous whitewater trips (M = 1.38 ± 3.24 trips), and level of certification related to the activity (M = 5.14 ± 1.68 relevant certifications).

Measures

Status ranking of group members. Each participant assigned a relative rank position to each member of their group including themselves based on a ranking system utilized by Jacob and Carron (1998). Participants were instructed "The status of members of a team could be based on a number of factors. Considering all the factors that you can think of, provide a status rank for each of the members of your specific group. It is possible to have tie ranks [people with a similar ranking]". Space was provided for them to rank their group members, including themselves. Lower values (e.g., 1, 2, 3) reflect higher status.

From the responses of the individual rankings, three measures were obtained. First, a *self-ranking* consisted of the position in which each individual placed him or herself. Second, responses from all members of the group (not including the person of interest) were averaged to provide a *normative ranking* for each of the participants (i.e., the average rank position for each person). Third, self-rankings (i.e., the position where each participant ranked him or herself) were subtracted from normative rankings to obtain a *reciprocal status ranking* or what might be termed a discrepancy score. In this case, reciprocal status ranking scores above zero reflected individuals who believed themselves to be higher in the status ranking than what was the average given by his or her peers.

Overall group cohesion. An adapted version of the Group Environment Questionnaire (GEQ; Carron, Widmeyer, & Brawley, 1985) was utilized to measure cohesion. Over the past 20 years, this has been the most widely used instrument to assess cohesion in sport and physical activity groups and has demonstrated adequate reliability and validity (Carron, Brawley, & Widmeyer, 2002). This instrument has been successfully adapted to other environments including general physical activity (Estabrooks & Carron, 2000). In addition, Carron, Brawley, and Widmeyer. (2002) encouraged researchers who are applying this questionnaire in other settings to (a) directly use relevant GEQ items, (b) revise the wording of existing items so that it becomes context relevant, and/or (c) delete items that appear to be inappropriate. In the present study, the adaptation of the instrument included an assessment of the relevancy of wording to the outdoor expedition environment and resulted in the removal of one item ("I am not happy with the amount of playing time I get"). The GEQ assesses 4 dimensions of cohesion including Individual Attractions to the Group-Social (ATG-S; 5 items); Individual Attractions to the Group-Task (ATG-T; 3 items); Group Integration-Task (GI-T; 5 items); and Group Integration-Social (GI-S; 4 items).

Participants responded to each of the 17 statements on a nine-point Likert-type scale anchored at 1 by "Strongly Disagree" and 9 by "Strongly Agree". Thus, higher scores reflect stronger perceptions of cohesiveness. Mean responses were calculated for each dimension. Internal consistency values obtained in the present study indicated adequate reliability for the dimensions of ATG-S (.85), ATG-T (.77), and GI-T (.67) based on suggestions by Nunnally (1978). However, the GI-S scale demonstrated poor internal consistency (i.e., .40) and thus was removed from further analyses.

Daily group cohesion measure. To assess whether the degree of congruence of formal and informal status hierarchies was related to cohesion, it was necessary to obtain a daily assessment of cohesion to match with the activities of each assigned leader. As part of their course requirements, participants were required to keep a logbook throughout the expedition. To assess cohesion, participants were further asked to respond to the statement "Today, our group was united in trying to reach its goals" on a nine-point Likert-type scale anchored at 1 by "Strongly Disagree" and 9 by "Strongly agree".

Procedure

The setting. Participants were enrolled in a fourth year university level course designed to provide a practical experience in the area of outdoor based adventure leadership. Specifically, participants were taking part in a 16 day canoeing expedition in Northern Ontario and Quebec. This expedition marks the culmination of a 4 year academic program devoted to Outdoor Adventure Leadership. A primary objective of the course was to allow each participant the opportunity to lead his or her group for a period no less than one day during the expedition. It should be noted that this study took place over the course of two spring periods with two separate expedition groups involved in the study each year. Also, while the rivers that were traveled differed between years, river characteristics and similar geographical locales were maintained. Methods and procedures were identical in each phase.

The first two groups ($n_{\text{Group 1}} = 8$, $n_{\text{Group 2}} = 7$) in this study completed the Kattawagami River in Northern Ontario, Canada from June 3 – 18, 2005. These groups started their expedition at Kattawagami Lake, which is located 95 miles (153 kms) northeast of the town of Cochrane, Ontario, Canada. The expedition followed the

Kattawagami north to where it joined the Kesagami River, and then entered the mouth of the Harricanaw River at the southern tip of James Bay, Ontario. The entire route covered a distance of 119 miles (193 kms) and, in terms of technical difficulty or challenges, the river presented 32 swifts, 65 rapids, and 13 waterfalls.

The second two groups ($n_{\text{Group 3}} = 8$, $n_{\text{Group 4}} = 9$) completed the Pontax River in Northern Quebec, Canada from May 30 to June 15, 2006. This expedition started from Champion Lake, Quebec and followed the Pontax River west for 154 miles (248 kms) to James Bay, and then continued south for 9 miles (15kms) along the coast to the town of Waskaganish on the south shore of the Rupert River at James Bay. The Pontax River flows east to west, passing under the James Bay Highway at a point 300 kms north of the town of Mattagami, Quebec. Technically, the river consisted of 37 swifts, 78 rapids and 7 waterfalls.

Research phase. Upon receiving institutional ethics approval to conduct the study, the lead investigator met with the groups of participants prior to their departure to explain the nature of the study and to ask for their voluntary inclusion. They were not required to take part in the study for course credit and thus were free to volunteer. Participants read a letter of information and signed a consent form. Subsequent to obtaining informed consent but in the same session, each participant completed their initial assessment of his or her specific group's status ranking. Participants were then given small laminated cards that contained the daily cohesion question to attach to their logbooks. At the end of each day, responses to this question were recorded in their logbooks in addition to other information required by course instructors (e.g., weather, geographical location, other in-situ observations and personal reflections, etc.). At the end of the expedition, participants

were asked to respond to the Group Environment Questionnaire (GEQ) as an assessment of overall perceptions of cohesion across the 16 day period.

Results

Descriptive Statistics

Means and standard deviations of the three cohesion dimensions are presented in Table 1. Specifically, keeping in mind that the scale ranges from 1-9 with higher values indicating greater cohesion, perceptions of ATG-S ($5.89 \leq M \leq 7.56$), ATG-T ($6.11 \leq M \leq 7.16$), and GI-T ($4.85 \leq M \leq 7.10$) were moderate to high in nature. Table 2 presents the relevant bivariate correlations between the cohesion dimensions and various status rankings obtained. Generally, the intercorrelations among cohesion dimensions were moderate in nature ($.50 \leq r \leq .71$) and are representative of previous research with the Group Environment Questionnaire.

Purpose 1: Relationship between Reciprocal Status Ranking and Cohesion

Examination of bivariate correlations in Table 2 revealed that the only significant correlation between the values of the various status rankings and three dimensions of cohesion was between reciprocal status ranking and Attractions to the Group-Social (ATG-S; $r = -.49$, $p < .01$). Specifically, this result indicated that those individuals who ranked themselves higher than where their peers ranked them (i.e., greater discrepancy) were more likely to view their attraction to social aspects of the group as being lower.

Purpose 2: Effect of Formal and Informal Status Congruency on Cohesion

Bivariate correlations examining the relationships between daily cohesion perceptions with the status rankings of the leaders formally prescribed on those days are presented in Table 3. These results demonstrated that the normative ($r = -.38$, $p < .05$) and

reciprocal (r = -.43, p < .01) status rankings were correlated with cohesion. Lower values of status obtained through the measures of the present study actually indicate higher status (i.e., a value of 1 is the highest status rank). Thus, these correlations indicated that greater cohesion was perceived when higher status members were in formal leadership positions.

Purpose 3: Group Consistency in Status Rankings and Differences in Cohesion

The third purpose was to calculate the consistency of status rankings within the four groups and, if differences existed in these consistency values, to determine whether groups differed in perceptions of cohesion. To calculate consistency (agreement) values within groups on status rankings, Kendall's coefficient of concordance '*W*' was utilized. This statistic can be calculated when the data are organized such that each group member (placed on individual rows) ranks every other group member (displayed over a series of columns). Kendall's formula for *W* is:

$$W = \frac{12(S)}{m^2(n^3 - n)}$$

where S = sum of squares of the column total deviations from the grand mean, n = the number of individuals being ranked, and m = the number of individuals who are ranking others (Slater, 1955). In the present study, the participants were also ranking themselves within the group thus $m = n$. Values obtained using this method range from .00 (lack of consensus) to 1.00 (complete consensus). To determine if each of the four groups achieved consensus at a statistically significant level, a χ^2 value was obtained (χ^2 = m(n-1)W) and assessed with df = n – 1 (Legendre, 2005). Table 1 displays the Kendall coefficient of concordance (W) for each group. These values indicate the degree of

consistency in members' rankings for each team. Those values that have an asterisk indicate the groups who had consistency values significantly different from zero (i.e., they display some consistency in their rankings). As can be seen, only Group 4 (W = .201) did not display significant consensus in status rankings.

Members of Groups 1-3 (i.e., demonstrated some consensus) and Group 4 (i.e., non-consensus) were identified using an indicator variable. This was then used as a between subjects factor in a MANOVA. Taking the three dimensions of cohesion as the dependent variables, a significant overall effect was demonstrated, Wilks' $\lambda = .48$, $F(3,28) = 10.15$, $p < .01$, $\eta^2 = .52$. Subsequent univariate analyses revealed a significant effect for the cohesion dimension of GI-T, $F(1,30) = 26.09$, $p < .01$, $\eta^2 = .47$. This revealed that members of Group 4 ($M = 4.85$) perceived their group to be less cohesive from this perspective than those individuals who were members of groups demonstrating some level of consensus surrounding the status hierarchy ($M = 6.85$).

Discussion

The general outcome of this study suggests that cohesion and status perceptions are indeed related. This result is somewhat contrary to the only other study (e.g., Jacob & Carron, 1998) in a physical activity environment examining this issue. Overall, examining sport teams, Jacob and Carron (1998) did not find any support linking reciprocal status ranking (i.e., discrepancy) and cohesion and found minimal support indicating a relationship between the importance placed on status attributes and cohesion. In the present case, however, relatively strong evidence is provided linking cohesion to three different types of status congruency in outdoor adventure groups.

The results related to the first specific objective highlighted that one aspect of status perceptions (or, in this case, misperceptions) are related to individual beliefs regarding the group's level of cohesion. Those individuals who viewed themselves as occupying a higher position in the status hierarchy than the group was willing to afford them, tended to view their attractions to social aspects of the group as being lower. It is important to point out that neither the individual's assessment of their own rank (i.e., self-ranking) nor the average rank of that individual by his/her peers were singularly related to perceptions of cohesion. Rather, it was the discrepancy between these two perceptions that was important.

While this relationship was not demonstrated by Jacob and Carron (1998), previous literature in organizational psychology has suggested that having status discrepancies can have detrimental effects for the individual. Bacharach, Bamberger, and Mundell (1993), in a review of relevant literature on this topic, proposed that these inconsistencies could be associated with greater job stress due to higher levels of role ambiguity, role conflict, and role overload. In the Bacharach et al. study, status inconsistency was not related to individual vs. group comparisons as was such in the present study, but rather situations where social roles were discrepant (e.g., a highly educated individual doing menial type tasks or a low educated person occupying the position of CEO in a company). However, the overall point is that discrepancies between 'where we think we should be' vs. 'where we are' in the group hierarchy have implications at the individual level.

A second major finding of the present study was that having high esteem status individuals (i.e., high informal status ranking) in positions of high formal leadership was

beneficial for the group from a cohesion perspective. Perceptions of cohesion were typically greater on days when high esteem individuals were in charge of their groups. However, some limitations should be noted as many potential confounding variables were not included in this exploratory analysis. For example, it is possible that significant events could have occurred during the expeditions that were beyond the capabilities of lower status leaders and which did not occur for the other individuals on their leadership days. As anecdotal evidence of this possibility, it was noted in a post-expedition interview with one of the course instructors that challenges of the day (e.g., rapids, portages, waterfalls), adverse weather (e.g., temperature, wind, rain, barometric pressure) and other physical hardships could have played a part in perceptions of the groups' togetherness and overall effectiveness.

Another caveat to the overall findings of the present study is that there are situations where having congruency between informal and formal status hierarchies might be *detrimental* to group functioning. Building on work by Bass (1980), Carron et al. (2005) noted that high esteem status can result from positive or negative attributes (i.e., group members can identify with a leader based on qualities contributing to or detracting from group effectiveness). Consequently, two situations could arise. First, a high esteem status individual (based on positive attributes) could be in a high formal status position, which would be very desirable. A second possibility, however, is that a high esteem status individual (*based on negative attributes*) could be in a position of high formal status. Carron and colleagues (2005) warn against this situation as being highly undesirable and suggest that other leaders take the initiative to either remove this individual from a leadership position or from the group altogether to prevent him or her

from having a negative effect on the attitudes and behaviours of other members. Essentially, it is not desirable to give an individual who is distracting to the group a forum (through assigning a recognized leadership role) through which to promote negative behaviours.

The third major finding was that individuals who were members of groups exhibiting some consensus with regard to their status hierarchies perceived their groups to be more cohesive than those individuals in the group that did not display consensus. While this section of results should be interpreted with caution given the low number of groups available for analysis, the findings are consistent with previous group oriented research. As one example, this result provides support for Jacob and Carron's (1998) suggestion that group consensus on status rankings would likely have a large influence on cohesion. In addition, it falls in line with previous research that has found that group members who share common beliefs regarding their team also perceive themselves to be more cohesive (Carron et al., 2003).

The results of the present study have practical implications for the development of effective outdoor groups on extended backcountry expeditions. Beyond the usual outdoor education content on leadership development and group dynamics, the current outdoor literature is also ripe with tools and techniques that can be used prior to an adventure experience to enrich the experience and enhance performance in participants. Concepts such as Challenge By Choice and Full Value Contract were popularized by Project Adventure in the eighties (Schoel, Prouty, & Radcliffe, 1988), and have been applied to more recent theories of effective adventure leadership (Priest & Gass, 2005). Other facilitation techniques such as frontloading, framing, and pre-briefing are also used

extensively to enhance the outdoor learning experience for both individuals and groups (Priest & Gass, 2005). Although these tools and techniques are readily accepted and applied by practitioners, they do not currently reflect or include a focus on ensuring awareness by the group of the personal attributes and previous experiences of each individual member.

In presenting a model of communication and problem-solving on extended field based courses (similar to the courses and context of the current study), Raiola (2003) referred to the need for leaders to address interpersonal and intra-personal issues as efficiently as possible. He further suggests that "usually these issues are addressed before the group embarks on its journey, while you establish individual and group goals, discuss rights and responsibilities, and develop agreements aimed at facilitating a positive educational experience" (p. 51). Prior to embarking, it may also be worthwhile to address attributes of leadership status for each individual in a group.

Assuming that one of the implicit goals of extended outdoor expeditions is to have a cohesive group, the findings in the current study may help educators and practitioners work towards consensus in group perceptions by focusing on developing an awareness of leadership status and the determinants of status to help a group "stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (Carron, Brawley, & Widmeyer, 1998, p. 213). Perhaps this can best be accomplished during the pre-trip preparation and planning stage when addressing the interpersonal and intra-personal issues referred to by Raiola (2003). For instance, if some (or all) attributes that may contribute to status perceptions are discussed and known in detail (e.g., experience and ability) by all members of a group prior to embarking on a

multi-day expedition, there may be an increased likelihood that the individuals in the group will have greater consensus on their status hierarchies and subsequently perceive their group as being more cohesive.

Further, from the educational context of a leadership development program, more careful selection and assignment of leadership roles during the appropriate days of an expedition based on discussed attributes may also increase perceptions that a group is more cohesive. It may be possible to match individual group member skills and experience with the unique leadership demands on any given day during the expedition. For instance, if a leadership day demands significant navigation skills to ensure the group selects the best path through a maze of islands in a large lake, the leader with the most ability and experience in these skills would be assigned to the leadership role on that day. Similarly, the individual with the most ability and experience running rapids could be assigned to a day with the most significant whitewater challenges. In other words, by assessing both the skills and experience of each individual and the daily demands of the outdoor activity, assigning the "right leader for the day" may increase the likelihood that high esteem status individuals are in the formal leadership role for the day, ensuring effective group performance. A caveat to this approach of course, is in situations where educators prefer to place a less experienced and less skilled student in a more challenging situation for course designed learning objectives. In these situations group cohesion may be sacrificed in favor of increased opportunities for student learning.

Finally, by clearly discussing individual status attributes during the preparation phase or early phases of group development, there may also be a chance that individuals who are misaligned in their perception of status hierarchies (i.e., view themselves as

occupying a higher position in the status hierarchy than the group was willing to place them) may have a clearer view of where they fit within the group. In turn, this may improve their attractions to task and social aspects of the group, resulting in more enjoyment/satisfaction during and after completion of the expedition.

Given that misaligned perceptions could impact judgment, decision-making, and behaviours, a further possible implication worthy of future exploration is that the re-alignment of status perceptions early in the preparation of an outdoor experience may have risk management implications. For example, if an individual has misrepresented him/herself and is subsequently asked to perform a critical swift water rescue task in an emergency situation with a capsized canoe in a rapid, the individual may not be able to perform to the level expected by the group or leader. Conversely, a leader that perceives his/her status as higher than where the group was willing to place him/her may not be in a position to be trusted. In other words, the leader may not receive the level of followership required in crisis situations. In short, a group with misaligned status perceptions may have less trust and possibly poorer communication, critical elements whenever a group is in a high risk crisis situation.

The above paragraphs make the case that understanding the background experiences and characteristics of group members involved in expeditions of this type is important. The next step would be to determine exactly what information is critical for all group members to understand about each other. It is interesting to note that prior to embarking on both rivers traveled by the four groups in the current study, the details of the rivers, distances, campsites, rapids, waterfalls, challenges and hazards were known in detail well in advance. Moreover, many of these details were quantifiable. For instance,

the International Scale of River Rating Difficulty (see American Canoe Association, n.d.) is a system of classifying individual rapids on a river that has received international acceptance and is in use around the world. This river rating difficulty was applied to the 65 rapids on the Kattawagami River and the 78 rapids on the Pontax River. However, despite the detail and quantitative information available for each river, much less information was known about the background experience, abilities and skills of each of the participants prior to embarking on each river expedition included in this study.

Consequently, as a first step, it seems logical to have group members share information related to their experiences in the above tasks (e.g., experiences with rivers, various distances/lengths of trips, campsites, rapids, waterfalls, challenges and hazards). Although not very common in the outdoor adventure community, a quantifiable Paddler Rating System has appeared in several canoeing guide books published by the Ontario Recreational Canoeing Association (e.g., Drought & Snelleman, 1996). Using a paddler rating system like this may be one way that future researchers can quantify the level of skill and ability of individual participants on a canoe expedition. Quantifying and subsequently discussing individual skills and abilities in a group setting (e.g., having each group member present his/her scores to the remaining members) prior to embarking on an extended backcountry expedition may help ensure better alignment and group consensus in their perceptions of the group's status hierarchy and who should be called on for the variety of situations that could arise.

The results of the present study support these considerations for future research and applications for outdoor educators and practitioners in addition to providing a more general link between status congruency and cohesion. That this link exists should not be

surprising given Jacob and Carron's (1998) statement that "status is an integral part of group structure (together with position, roles, and norms) and, therefore, is a component of group stability. Cohesion, a fundamental group process, is tautological with group stability" (p. 196). Given the important relationship between cohesion and performance (Carron, Colman, Wheeler, & Stevens, 2002), further understanding of the structural properties of groups (such as their status hierarchies) is critical in the future.

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Table 1

Descriptive statistics for cohesion and consistency values

		Group 1	Group 2	Group3	Group4
ATG-S	M	7.56	5.89	7.56	5.97
	SD	1.50	.76	1.17	1.85
ATG-T	M	6.94	6.82	7.16	6.11
	SD	.82	1.38	.97	1.58
GI-T	M	7.05	6.34	7.10	4.85
	SD	.72	.77	4.85	1.48
Consistency	*W*	.583*	.597*	.392*	.201
	χ^2	32.65	33.43	21.95	14.47

Note. ATG-S = Individual Attractions to the Group-Social, ATG-T = Individual Attractions to the Group-Task, GI-T = Group Integration-Task. * denotes a consistency value determined to be significantly greater than zero.

Table 2

Bivariate Correlations Between Cohesion Dimensions and Status Rankings

Variable	ATG-S	ATG-T	GI-T	SR	NR	RR
ATG-S	---	.50**	.56**	.33	-.24	-.49**
ATG-T		---	.71**	.33	.13	-.19
GI-T			---	.27	-.08	-.31
Self-ranking (SR)				---	.34	-.62**
Normative Ranking (NR)					---	.53**
Reciprocal Ranking (RR)						---

Note. ATG-S = Individual Attractions to the Group-Social, ATG-T = Individual Attractions to the Group-Task, GI-T = Group Integration-Task

* $p < .05$, ** $p < .01$

Table 3

Bivariate Correlations Between Daily Cohesion Values and Status Rankings of those Occupying Formal Leadership Positions.

Variable	Cohesion	SR	NR	RR
Cohesion	---	.13	-.38*	-.43**
Self-ranking (SR)		---	.34	-.62
Normative Ranking (NR			---	.53
Reciprocal Ranking (RR)				---

Note. ATG-S = Individual Attractions to the Group-Social, ATG-T = Individual Attractions to the Group-Task, GI-T = Group Integration-Task

* $p < .05$, ** $p < .01$